

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Amended) ~~In a wireless communication system wherein data is transmitted in blocks over a communication channel during successive time intervals of a specified size and block error rate (BLER) information of the reception of the data blocks on the communication channel is reported for use in controlling channel transmissions, a~~ A method for block error rate (BLER) estimate reporting in a wireless transmit receive unit (WTRU), the method comprising:

receiving ~~a~~ the communication channel and for each of a series of successive time intervals:

counting ~~a~~ the number of data blocks received over the time interval;

storing a value  $i$  representative of the number of data blocks received;

performing error checking on the data blocks received;

storing a value  $S(i)$  representative of the number of data blocks having errors;

comparing value  $i$  to a first predetermined threshold to produce a first BLER estimate report trigger when  $i$  exceeds the threshold;

calculating a BLER estimate based on the values  $i$  and  $S(i)$ ;

~~comparing the BLER estimate to a predetermined multiple of a target BLER value for the channel~~ comparing value  $i$  to a second predetermined threshold to produce a second BLER estimate report trigger when the BLER estimate exceeds the a predetermined multiple

of the target BLER value; and

    sending a BLER estimate report in response to the production of the first or second report triggers; whereby no report is sent when the first or second triggers are not produced.

2.     Cancelled.

3.     (Original) The method of claim 1 wherein said BLER estimate report is reflective of data block reception over a time interval that includes the  $i$  number of observed data blocks over the time interval; the  $S(i)$  number of erroneous data blocks over the time interval; the BLER estimate for the time interval; and an identification of the report trigger.

4.     (Original) The method of claim 3 wherein the data blocks are transport blocks (TBs) associated with a plurality of transport channels (TrCHs) multiplexed on a coded composite transport channel (CCTrCH), each transport channel having a target BLER based on quality of service requirement and the method is performed with respect to a selected channel identified as a reference transport channel (RTTrCH).

5.     (Original) The method of claim 4 wherein said BLER estimate is representative of the CCTrCH, said report further comprising:

    a target BLER for the CCTrCH;  
    an identification code for the CCTrCH.

6.     (Original) The method of claim 5 wherein said report further

comprises:

an identification code for the reference transport channel.

7. (Amended) ~~In a wireless communication system wherein data is transmitted in blocks over a communication channel during successive time intervals of a specified size and block error rate (BLER) information of the reception of the data blocks on the communication channel is reported for use in controlling channel transmissions, A method for block error rate (BLER) estimate reporting in a wireless transmit receive unit (WTRU), the method comprising:~~

a) receiving the communication channel and for each of a series of successive time intervals:

b) storing a value  $i$  representative of the number of received data blocks and a value  $i\_prime$  representative of value  $i$  minus a predetermined minimum number of data blocks related to performing error checking with a predetermined minimum acceptable accuracy;

c) performing error checking on the received data blocks;

d) storing a value  $S(i)$  representative of the number of data blocks having errors;

e) calculating a BLER estimate based on the  $i\_prime$  and  $S(i)$  values;

f) comparing value  $i$  to ~~at least one predetermined threshold~~ a first predetermined threshold based on a minimum number of data blocks to calculate cyclic redundancy error check on the data blocks, a second predetermined threshold for a minimum number of data blocks, and a third predetermined threshold for a maximum number of data blocks;

g) comparing the BLER estimate to at least one predetermined threshold equal to a multiple of the target BLER value to produce at least

one BLER estimate report trigger; and

h) sending a BLER estimate report upon the production of the report trigger,

wherein the BLER reporting occurs during a steady state phase of a call session between two entities of the communication system, wherein said steps are repeated to the extent possible, during the call session in entirety.

8. Cancelled.

9. Cancelled.

10. Cancelled.

11. (Original) The method of claim 7 wherein step (g) further comprises a first predetermined threshold of a  $k$  multiple of the target BLER, wherein  $k > 1$ .

12. (Original) The method of claim 11 wherein step (g) further comprises a second predetermined threshold of an alpha multiple of the target BLER, wherein  $\alpha = 1$ .

13. (Original) The method of claim 12 wherein step (g) further comprises a third predetermined threshold of a gamma multiple of the target BLER, wherein  $\gamma < 1$ .

14. (Original) The method of claim 7 wherein said BLER estimate report is

reflective of data block reception over a time interval that includes the  $i_{\text{prime}}$  number of data blocks; the  $S(i)$  number of erroneous data blocks; the BLER estimate; and an identification of the report trigger.

15. (Original) The method of claim 14 wherein the data blocks are transport blocks (TBs) associated with a plurality of transport channels (TrCHs) multiplexed on a coded composite transport channel (CCTrCH), each transport channel having a target BLER based on quality of service requirement and the method is performed with respect to a selected channel identified as a reference transport channel (RTrCH).

wherein the transport blocks are associated with a plurality of transport channels multiplexed on a coded composite transport channel (CCTrCH), each transport channel having a target BLER based on quality of service requirement,

16. (Original) The method of claim 15 wherein said BLER estimate is representative of the CCTrCH, said report further comprising:

a target BLER for the CCTrCH;  
an identification code for the CCTrCH.

17. (Original) The method of claim 16 wherein BLER measurement is performed a reference transport channel and BLER estimate report further comprises:

an identification code for the reference transport channel.

18. (Original) A wireless transmit receive unit (WTRU) comprising a receiver for a communication station for use in a wireless communication system

~~wherein data is transmitted in blocks over a communication channel during successive time intervals of a specified size and block error rate (BLER) information of the reception of the data blocks on the communication channel is reported for use in controlling channel transmissions, the receiver comprising:~~

an error check unit configured to perform error checking on the data blocks received;

at least one counter configured to count  $i$  number of data blocks received over the time interval and  $S(i)$  number of data blocks having errors;

a processor configured to compare value  $i$  to at least one predetermined threshold; configured to calculate a BLER estimate based on the values  $i$  and  $S(i)$ ; configured to compare the BLER estimate to at least one predetermined multiple of a target BLER value for the channel to produce at least one BLER estimate report trigger when the BLER estimate exceeds the predetermined multiple of the target BLER value; and configured to create a BLER estimate report in response to the production of at least one report trigger, wherein said BLER estimate report is reflective of data block reception over a time interval that includes the  $i$  number of observed data blocks over the time interval; the  $S(i)$  number of erroneous data blocks over the time interval; the BLER estimate for the time interval; and an identification of the report trigger; and

a memory unit for storing the count values  $i$  and  $S(i)$ , the BLER estimate, and the trigger threshold values.

19. Cancelled.

20. Cancelled.

21. (Amended) The invention of claim ~~18~~ ~~19~~ wherein the data blocks are transport blocks (TBs) associated with a plurality of transport channels (TrCHs) multiplexed on a coded composite transport channel (CCTrCH), each transport channel having a target BLER based on quality of service requirement and the BLER estimate is associated with a selected channel identified as a reference transport channel (RTrCH).

22. (Original) The invention of claim 21 wherein said BLER estimate is representative of the CCTrCH, said report further comprising:

- a target BLER for the CCTrCH;
- an identification code for the CCTrCH.

23. (Original) The invention of claim 22 wherein said report further comprises:

- an identification code for the reference transport channel.

24. (Original) The invention of claim 18 wherein the processor is further configured to compare value  $i$  to a first predetermined threshold based on a minimum number of data blocks to calculate cyclic redundancy error check on the data blocks.

25. (Original) The invention of claim 24 wherein the processor is further configured to compare value  $i$  to a second predetermined threshold for a minimum number of data blocks, and a third predetermined threshold for a maximum number of data blocks.

26. (Original) The invention of claim 18 wherein the processor is further configured to compare the BLER estimate to a first predetermined threshold of a  $k$  multiple of the target BLER to produce at least one report trigger, wherein  $k > 1$ .

27. (Original) The invention of claim 18 wherein the processor is further configured to compare the BLER estimate to a second predetermined threshold of an alpha multiple of the target BLER to produce at least one report trigger, wherein  $\alpha = 1$ .

28. (Original) The invention of claim 18 wherein the processor is further configured to compare the BLER estimate to a third predetermined threshold of a gamma multiple of the target BLER to produce at least one report trigger, wherein  $\gamma < 1$ .